AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   **(currently amended)** An access control system, comprising:

an operating system; and

an access control device for controlling access from each of one or more processes executed by the operating system to one of one or more devices, wherein:

~~each of the processes accesses one of the devices via a device file or one of device files corresponding to the one device;~~

~~a plurality of device files may be generated for any one or more of the devices;~~

the operating system comprises:

> a device file generating [[means]] unit for generating a device file or device files for a route or each of routes through which each of the processes accesses one of the devices;

> an access rule setting [[means]] unit for setting access rules indicating methods for accessing device files for each of the routes; and

> an access control [[means]] unit for controlling access to each device file according to [[an]] the associated access rule;

the access control device includes:

> an access rule extracting unit for extracting ~~unifies~~ access rules set for routes to a plurality of device files corresponding to a common device; and

> an access rule deriving unit for deriving a unified access rule for each device on the basis of the extracted access rules; and

the access control <u>unit is configured to control</u> ~~means controls~~ access to each device file according to [[a]] <u>the associated</u> unified access rule ~~if the access rules have been unified~~.

2. **(currently amended)** An access control device for controlling access from each of one or more processes to one of one or more devices, wherein:

~~each of the processes accesses one of the devices via a device file or one of device files corresponding to the one device;~~

a device file or device files are generated for a route or each of routes through which each of the processes accesses one of the devices;

access rules indicating methods for accessing device files are set for each of <u>the</u> routes; <u>and</u>

access to each device file is controlled according to [[an]] <u>the associated</u> access rule; [[and]]

~~a plurality of device files may be generated for each of arbitrary ones of the devices,~~ the access control device comprising:

<u>an</u> access rule extracting [[means]] <u>unit</u> for extracting access rules set for routes to a plurality of device files corresponding to a common device; and

<u>an</u> access rule deriving [[means]] <u>unit</u> for deriving a unified access rule for each device on the basis of the extracted access rules<u>, wherein access to each device file is controlled according to the associated unified access rule</u>.

3. **(currently amended)** The access control device according to claim 2, wherein if a plurality of access rules extracted for [[each]] <u>a</u> device are different from each other, the access rule deriving <u>unit is configured to employ</u> ~~means employs~~ one of the plurality of different access rules as [[a]] <u>the</u> unified access rule.

4. **(currently amended)** The access control device according to claim 2, wherein if a plurality of access rules extracted for [[each]] <u>a</u> device are different from each other, the

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access rule deriving unit is configured to derive the ~~means derives a~~ unified access rule on the basis of characteristics of files linked to the respective device files.

5. **(currently amended)** The access control device according to claim 2, wherein if a plurality of access rules extracted for a device are different from each other, the access rule deriving unit is configured to employ a most restrict one among ~~means employs one of~~ the plurality of different access rules ~~most restrictions on access to the device file~~ as [[a]] the unified access rule.

6. (original)   The access control device according to claim 2, wherein:

the processes are executed by an operating system;

each route exists in one or more directories managed by the operating system and consists of one or more files linked to each other between each process and each device file; and

each access rule is set for a directory in which a file linked to a device file exists.

7. **(currently amended)** The access control device according to claim 2, wherein each access rule indicates at least whether [[each]] at least one of reading and writing on a device file by each of files linked to the device file is permitted or not.

8. **(currently amended)** The access control device according to claim 6, wherein:

[[an]] the operating system stores the access rules;

the access rule extracting unit is configured to extract ~~means extracts~~ access rules set for routes to each of a plurality of device files corresponding to each common device from the stored access rules when the operating system is activated; and

the access rule deriving unit is configured to derive ~~means derives~~ a unified access rule for each device from the extracted access rules when the operating system is activated.

9. **(currently amended)** The access control device according to claim 2, wherein:

an operating system <u>that</u> accepts alternation of an access rule <u>notifies</u> ~~to notify~~ the access control device of the altered access rule;

the access rule extracting <u>unit is configured to extract</u> ~~means extracts~~ access rules set for routes to each of a plurality of device files relating to the altered access rule when <u>the access control device is</u> notified of the altered access rule; and

the access <u>control device further comprises a difference</u> rule deriving <u>unit for deriving</u> ~~means derives~~ a unified access rule for each device <u>corresponding to</u> ~~from the extracted access rules when notified of~~ the altered access rule<u>, from the extracted access rules when the access control device is notified of the altered access rule.</u>

10. **(currently amended)** An access control method [[for]] <u>of</u> controlling access from each of one or more processes to one of one or more devices, wherein each of the processes accesses one of the devices via a device file or one of device files corresponding to the one device, the access control method comprising the steps of:

generating a device file or device files for a route or each of routes through which each of the processes accesses one of the ~~devices, a plurality of device files being generated possibly for each of arbitrary ones of the~~ devices;

setting access rules indicating methods for accessing device files for each of <u>the</u> routes;

extracting access rules that are set for routes to a plurality of device files corresponding to a common device;

deriving a unified access rule for each device on the basis of the extracted access rules; and

controlling access to each device file according to the <u>associated</u> unified access rule.

11. **(currently amended)** A <u>computer-readable medium containing a</u> program for controlling access from each of one or more processes to one of one or more devices, wherein each of the processes accesses one of the devices via a device file or one of device files corresponding to the one device, the program<u>, when executed by</u> ~~causing~~ a computer<u>, causing the computer</u> to execute the steps of:

generating a device file or device files for a route or each of routes through which each of the processes accesses one of the ~~devices by each of the processes, the plurality of device files being generated possibly corresponding to any one or more of the~~ devices;

setting access rules indicating methods for accessing device files for each of <u>the</u> routes;

extracting access rules that are set for routes to a plurality of device files corresponding to a common device;

deriving a unified access rule for each device on the basis of the extracted access rules; and

controlling access to each device file according to the <u>associated</u> unified access rule.

12. **(new)** The access control system according to claim 1, wherein:

each route exists in one or more directories managed by the operating system and consists of one or more files linked to each other between each process and each device file; and

each access rule is set for a directory in which a file linked to a device file exists.

13. **(new)** The access control system according to claim 1, wherein:

the access rule extracting unit is configured to extract access rules set for routes to each of a plurality of device files corresponding to each common device when the operating system is activated; and

the access rule deriving unit is configured to derive a unified access rule for each device from the extracted access rules when the operating system is activated.

14. **(new)** The access control system according to claim 1, wherein:

the operating system is configured to, upon accepting alternation of an access rule, notify the access control device of the altered access rule;

the access rule extracting unit is configured to extract access rules set for routes to each of a plurality of device files relating to the altered access rule when the access control device is notified of the altered access rule; and

the access control device further comprises a difference rule deriving unit for deriving a unified access rule for each device corresponding to the altered access rule, from the extracted access rules when the access control device is notified of the altered access rule.